

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF VIRGINIA
Norfolk Division



CERTUSVIEW TECHNOLOGIES,
LLC,

Plaintiff,
v.

Case No.: 2:13cv346

S&N LOCATING SERVICES, LLC,
and
S&N COMMUNICATIONS, INC.,
Defendants.

OPINION AND ORDER

This matter is before the Court following a Markman hearing, conducted for the purpose of construing ten disputed claim terms of the patents-in-suit. After careful consideration of the briefs submitted by the parties and the arguments advanced at the Markman hearing, the Court issues the following Opinion and Order detailing the claim constructions in this case.

I. FACTUAL AND PROCEDURAL HISTORY

At issue in this case are five related patents held by plaintiff CertusView Technologies, LLC ("Plaintiff"): U.S. Patent No. 8,290,204 ("the '204 patent"), U.S. Patent No. 8,407,001 ("the '001 patent"), U.S. Patent No. 8,340,359 ("the '359 patent"), U.S. Patent No. 8,265,344 ("the '344 patent"), and U.S. Patent No. 8,532,341 ("the '341 patent"). All five of the patents-in-suit relate to the electronic documentation of a "locate operation" executed in a geographic location where

ground that will soon be excavated or otherwise disturbed is marked with "paint, flags, or some other marking object or material to indicate the presence of an underground facility." See Joint Claim Constr. Chart at 2, ECF No. 101-2. The specifications explain that "[d]ocumentation of some or all of the information regarding a locate operation is often called a manifest." See, e.g., '341 patent at 2:27-28. Locate operations were originally "documented using a sketching process, which result[ed] in the creation of a paper manifest." Id. at 2:49-51. The sketches "produced by hand" were "not to scale, prone to human error, and costly in drafting time spent by the locate technician." Id. at 2:51-53. Furthermore, manifests stored either as "paper or digital images" were "not easily interrogated for data in any mechanized way." Id. at 2:55-57. Thus, an "electronic manifest" was conceived to achieve "several purposes," including "improvements in accuracy," saving of time, providing "a variety of data formats," and "easier dissemination and record-keeping." Id. at 30:27 through 31:51.

A. The Patents

The applications for the '204, '359, '344, and '341 patents were continuations-in-part of the same application, No. 12/029,732, filed on February 12, 2008. In addition, the applications for the '204 and '341 patents were also

continuations-in-part of application No. 12,366,853, filed on February 6, 2009. See generally Am. Compl., Exs. A-E, ECF Nos. 55-1, 55-2. The '001 patent, although it shares inventors, assignee, and prosecuting patent attorney with the other patents-in-suit, is not part of the above-mentioned patent families.

1. The '341 Patent

The '341 patent is titled "Electronically Documenting Locate Operations for Underground Utilities." '341 patent, ECF No. 55-2 at 48. The "[v]arious embodiments of the ['341 patent's] invention are directed to methods, apparatus and systems for creating a searchable electronic record, or 'electronic manifest,' relating to a geographic area including a dig area to be excavated or otherwise disturbed." Id. at 2:61-65. As described in the methods of independent claim 1 and dependent claim 7, a locate technician, upon receiving a "locate request ticket specifying the dig area and requesting performance of the locate operation," receives "at least one digital image," which is displayed "on a display device." Id. at 35:48-53. When underground facilities in the dig area are identified and physically marked, the technician adds "to the displayed digital image at least one electronic colored marker corresponding to the at least one physical colored marker . . . so as to generate a marked-up image." Id. at 35:6-10.

"[I]nformation relating to the marked-up image" is then "electronically transmit[ted] and/or electronically stor[ed]." Id. at 35:13-15. The apparatus described in independent claim 17 includes a "processing unit" to execute "instructions" for "display[ing] [the digital image] on the display device," "add[ing] [the electronic markers] to the displayed digital image," and "electronically transmit[ting] and/or electronically stor[ing] information relating to the marked-up image." Id. at 36:63-37:20.

2. The '204 Patent

The '204 patent is titled "Searchable Electronic Records of Underground Facility Locate Marking Operations." '204 patent, ECF No. 55-1 at 2. The specification explains that "a searchable electronic record" is synonymous with "an electronic manifest," which, "as used herein, may generally refer to one or more computer-readable files that include some or all of the information in a manifest." Id. at 12:17-18. The '204 patent claims "methods, apparatus and systems for creating a searchable electronic record, or 'electronic manifest.'" Id. at 2:51-53. The "method for generating a searchable electronic record" comprises "electronically receiving . . . at least one input image of . . . the dig area," displaying "at least a portion of the . . . input image on a display device," adding "digital representation[s] of . . . physical locate mark[s] so as to

generate a marked-up image," and "electronically transmitting and/or electronically storing information relating to the marked-up image so as to generate the searchable electronic record of the locate operation." Id. at 34:52-35:9. According to the '204 patent specification, the "searchable electronic record may include a variety of non-image information to facilitate identification of the geographic location of the physical locate mark(s)." Id. at 3:15-18. Such "non-image information" may include "a text description of the geographic location of the physical locate mark(s), an address or lot number of a property, . . . geo-encoded information such as geographic coordinates, . . . as well as other non-image information relating generally to the locate operation." Id. at 3:17-26. "The marked-up image(s) and the non-image information may be formatted in a variety of manners in the searchable electronic record," including formats such as "metadata associated with the marked-up image" or "separate data sets." Id. at 3:30-37.

3. The '344 Patent

The '344 patent is titled "Electronic Manifest of Underground Facility Locate Operation" and claims "[m]ethods and apparatus for generating a searchable electronic record of a locate operation performed by a locate technician." '344 patent, ECF No. 55-2 at 25. The apparatus described in

independent claim 1 of the '344 patent "for facilitating generation of a searchable electronic record" includes a "communication interface," id. at 17:40-53, which the specification explains "may include any transceiver-like mechanism that enables . . . communicat[ion] with other devices and/or systems," id. at 6:23-25, 7:14-16. The "processing unit[,] coupled to the communication interface, the display device, and the memory," receives "ticket information derived from the locate ticket" and "an image of . . . the dig area," "controls the display device to display at least a portion of the received image," "combines the electronically received image with image-related information so as to generate the searchable electronic record," and "controls the communication interface and/or the memory to electronically transmit and/or store the searchable electronic record of the locate operation." Id. at 17:48-18:19.

4. The '359 Patent

The '359 patent is titled "Electronic Manifest of Underground Facility Locate Marks." '359 patent, ECF No. 55-2 at 2. The '359 patent also claims methods and apparatus "for generating a searchable electronic record of a locate operation." Id. at 17:53-54, 18:53-54, 19:50-51. Like the apparatus described in the '344 patent, the apparatus claimed in the '359 patent comprises "a communication interface; a display

device; a memory to store processor-executable instructions; and a processing unit coupled to the communication interface, the display device, and the memory," which "controls the communication interface and/or memory to electronically transmit and/or electronically store a searchable electronic record of the locate operation." Id. at 19:50-20:6.

5. The '001 Patent

The '001 patent is titled "Systems and Methods for Using Location Data to Electronically Display Dispensing of Markers by a Marking System or Marking Tool." '001 patent, ECF No. 55-1 at 42. The '001 patent claims a system and method "for electronically displaying information relating to use of a marking system or marking tool configured to dispense one or more markers to mark . . . a location of an underground utility." Id. at 8:14-17, 9:50-54, 10:43-47, 10:59-63. The specification of the '001 patent explains that a "marking tool is typically used to mark the ground, pavement or other surfaces in order to provide a visual indication of the location of the underground utilities." Id. at 1:27-29. "According to one aspect, a marking system may include a marker dispenser to hold and dispense markers," as well as a "location tracking system to determine location data." Id. at 1:51-53. In "another aspect, a marking tool may include a housing," to which a "marker

dispenser" or a "location tracking system" may be "mounted." Id. at 1:59-61.

The system described in independent claim 1 of the '001 patent comprises "a processor to receive location data," and "a display device communicatively coupled to the processor." Id. at 8:19-22. The "processor uses the location data to control the display device so as to visually display a dispensing of the one or more markers that mark the location of the underground utility." Id. at 8:23-26. The system described in dependent claim 10 "further compris[es] a location tracking system communicatively coupled to the processor, wherein the processor electronically receives at least the location data from the location tracking system." Id. at 9:7-10.

B. Procedural History

Plaintiff filed the instant action against Defendants S&N Locating Services, LLC and S&N Communications, Inc. (collectively, "S&N" or "Defendants") on May 29, 2013, alleging that Defendants "have infringed, and continue to infringe, literally and/or under the doctrine of equivalents," four of the five patents-in-suit "by making, using, offering to sell, and/or selling devices and/or services covered by the claims of the [patents] and by actively and intentionally inducing others to infringe one or more claims of the" patents-in-suit. Compl. ¶¶ 14, 18, 22, 26, ECF No. 1. On December 6, 2013, Plaintiff

filed an amended complaint, alleging infringement of all five patents-in-suit. See Am. Compl. ¶¶ 15, 19, 23, 27, 32, ECF No. 55. On December 23, 2013, Defendants filed an Answer, denying "each and every allegation of Plaintiff's Amended Complaint." Defs.' Answer at 10, ECF No. 61. Defendants deny any infringement, including induced or contributory, and allege various affirmative defenses, including invalidity of the patents-in-suit, "laches, waiver, and/or estoppel," "the doctrine of unclean hands," and "failure to mitigate damages, if any." Id. at 11-12. Defendants also assert counterclaims against Plaintiff, seeking "declaratory judgment[s] of non-infringement . . . [and] invalidity" with regard to all five patents-in-suit. Id. at 15-20.

On March 14, 2014, the same date as the deadline for filing the parties' opening Markman briefs, Defendants filed an unopposed motion to enlarge the number of claim terms to be construed by the Court. ECF No. 73. Although the Court instructed the parties that it would "construe no more than ten (10) terms," ECF No. 56 at 6, Defendants requested that the Court construe 16 disputed terms, ECF No. 73. According to Defendants, because Plaintiff had "asserted 68 patent claims from 5 patents as allegedly being infringed," the parties had not "been able to reach agreement on 16 terms from the 68 asserted claims." Id. at 1-2. Both parties' opening Markman

briefs presented argument on the 16 disputed terms. On March 19, 2014, the Court denied the motion to enlarge the number of claim terms, noting "certain discovery disputes" that appeared to exist between the parties. ECF No. 86 at 7. Accordingly, the Court instructed the parties to submit up to 10 terms and provided that, "after the Court issues its ruling on claim construction and Plaintiff appropriately limits its claims," as Plaintiff assured the Court it would, "if there remains a 'fundamental dispute' regarding the meaning of any additional terms, the Court will permit further briefing to determine whether the Court has a 'duty to resolve [the dispute].'" Id. (quoting O2 Micro Int'l Ltd. v. Beyond Innovation Tech. Co., Ltd., 521 F.3d 1351, 1362 (Fed. Cir. 2008)). On March 21, 2014, the parties submitted their reply briefs, addressing only 10 terms, as instructed by the Court.

On April 1, 2014, the Court held a Markman hearing, where it heard argument concerning the disputed claim terms. After a careful review of the briefs and materials submitted by the parties, the record before the Court, and counsel's argument at the April 1, 2014 hearing, the Court has determined that the following constructions shall apply to the disputed claim terms.

II. CLAIM CONSTRUCTION PROCEDURE

In Markman v. Westview Instruments, Inc., 517 U.S. 370

(1996), the United States Supreme Court succinctly explained the basis for, and importance of, claim construction:

The Constitution empowers Congress "to promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries." Art. I, § 8, cl. 8. Congress first exercised this authority in 1790, when it provided for the issuance of "letters patent," Act of Apr. 10, 1790, ch. 7, § 1, 1 Stat. 109, which, like their modern counterparts, granted inventors "the right to exclude others from making, using, offering for sale, selling, or importing the patented invention," in exchange for full disclosure of an invention, H. Schwartz, Patent Law and Practice 1, 33 (2d ed. 1995). It has long been understood that a patent must describe the exact scope of an invention and its manufacture to "secure to [the patentee] all to which he is entitled, [and] to apprise the public of what is still open to them." McClain v. Ortmayer, 141 U.S. 419, 424 (1891). Under the modern American system, these objectives are served by two distinct elements of a patent document. First, it contains a specification describing the invention "in such full, clear, concise, and exact terms as to enable any person skilled in the art . . . to make and use the same." 35 U.S.C. § 112; see also 3 E. Lipscomb, Walker on Patents § 10:1, pp. 183-184 (3d ed. 1985) (Lipscomb) (listing the requirements for a specification). Second, a patent includes one or more "claims," which "particularly point[] out and distinctly claim[] the subject matter which the applicant regards as his invention." 35 U.S.C. § 112. "A claim covers and secures a process, a machine, a manufacture, a composition of matter, or a design, but never the function or result of either, nor the scientific explanation of their operation." 6 Lipscomb § 21.17, at 315-316. The claim "define[s] the scope of a patent grant," 3 id., § 11:1, at 280, and functions to forbid not only exact copies of an invention, but products that go to "the heart of an invention but avoids the literal language of the claim

by making a noncritical change," Schwartz, supra, at 82. . . .

Characteristically, patent lawsuits charge what is known as infringement, Schwartz, supra, at 75, and rest on allegations that the defendant "without authority ma[de], use[d] or [sold the] patented invention, within the United States during the term of the patent therefor" 35 U.S.C. § 271(a). Victory in an infringement suit requires a finding that the patent claim "covers the alleged infringer's product or process," which in turn necessitates a determination of "what the words in the claim mean." Schwartz, supra, at 80; see also 3 Lipscomb § 11:2, at 288-290.

Id. at 373-74.

It is well-settled that a determination of infringement requires a two-step analysis: "First, the court determines the scope and meaning of the patent claims asserted" and second, "the properly construed claims are compared to the allegedly infringing device." Cybor Corp. v. FAS Techs., Inc., 138 F.3d 1448, 1454 (Fed. Cir. 1998) (en banc) (citing, inter alia, Markman, 517 U.S. at 371-73). In conducting this analysis, it must be remembered that "[i]t is a 'bedrock principle' of patent law that 'the claims of a patent define the invention to which the patentee is entitled the right to exclude.'" Phillips v. AWH Corp., 415 F.3d 1303, 1312 (Fed. Cir. 2005) (en banc) (quoting Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc., 381 F.3d 1111, 1115 (Fed. Cir. 2004)); see Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1582 (Fed. Cir. 1996) ("First, we look to the words of the claims themselves, both

asserted and nonasserted, to define the scope of the patented invention.”).

A. Claim Construction Principles

Focusing on the first step of the infringement analysis, the Federal Circuit has repeatedly stated that “the words of a claim ‘are generally given their ordinary and customary meaning,’” and that “the ordinary and customary meaning of a claim term is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention.” Phillips, 415 F.3d at 1312-13 (quoting Vitronics, 90 F.3d at 1582). This “provides an objective baseline from which to begin claim interpretation” and is based upon “the well-settled understanding that inventors are typically persons skilled in the field of the invention and that patents are addressed to and intended to be read by others of skill in the pertinent art.” Id. at 1313. As noted by the Federal Circuit:

It is the person of ordinary skill in the field of the invention through whose eyes the claims are construed. Such person is deemed to read the words used in the patent documents with an understanding of their meaning in the field, and to have knowledge of any special meaning and usage in the field. The inventor’s words that are used to describe the invention—the inventor’s lexicography—must be understood and interpreted by the court as they would be understood and interpreted by a person in that field of technology. Thus the court starts the decisionmaking process by reviewing the same resources as would that person, viz., the patent specification and the prosecution history.

Id. (quoting Multiform Desiccants, Inc. v. Medzam, Ltd., 133 F.3d 1473, 1477 (Fed. Cir. 1998)). "'In some cases,'" however, "'the ordinary meaning of claim language as understood by a person of skill in the art may be readily apparent even to lay judges, and claim construction in such cases involves little more than the application of the widely accepted meaning of commonly understood words.'" Acumed LLC v. Stryker Corp., 483 F.3d 800, 805 (Fed. Cir. 2007) (quoting Phillips, 415 F.3d at 1314). Finally, when construing claim terms and phrases, the Court cannot add or subtract words from the claims or appeal to "abstract policy considerations" to broaden or narrow their scope. SmithKline Beecham Corp. v. Apotex Corp., 403 F.3d 1331, 1339-40 (Fed. Cir. 2005); see also Quantum Corp. v. Rodime, PLC, 65 F.3d 1577, 1584 (Fed. Cir. 1995) (observing that "it is well settled that no matter how great the temptations of fairness or policy making, courts do not redraft claims").

B. Types of Evidence to Be Considered

In determining the meaning of disputed terms or phrases, the Court must first examine the claims themselves. See Phillips, 415 F.3d at 1312; Vitronics, 90 F.3d at 1582. Indeed, the Federal Circuit has stated that the claims themselves, "both asserted and unasserted," can be "valuable sources of enlightenment as to the meaning of a claim term," in part, because "claim terms are normally used consistently throughout

the patent." Phillips, 415 F.3d at 1314. Furthermore, differences in claims can also be enlightening. "For example, the presence of a dependent claim that adds a particular limitation gives rise to a presumption that the limitation in question is not present in the independent claim." Id. at 1314-15.

"The claims, of course, do not stand alone," but, rather, "'must be read in view of the specification, of which they are a part.'" Id. at 1315 (quoting Markman v. Westview Instruments, Inc., 52 F.3d 967, 979 (Fed. Cir. 1995) (en banc)); see also Vitronics, 90 F.3d at 1582 ("[T]he specification is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term."); Multiform Desiccants, 133 F.3d at 1478 ("The best source for understanding a technical term is the specification from which it arose, informed, as needed, by the prosecution history."). The specification, as required by statute, describes the manner and process of making and using the patented invention, and, therefore, "claims must be construed so as to be consistent with the specification." Merck & Co. v. Teva Pharm. USA, Inc., 347 F.3d 1367, 1371 (Fed. Cir. 2003); see 35 U.S.C. § 112 (requiring that the specification describe an invention in "full, clear, concise, and exact terms"). The Federal Circuit and Supreme Court have thus long

emphasized the specification's important role in claim construction, noting that, usually, the specification "is dispositive," as it is "the single best guide to the meaning of the disputed term." Phillips, 415 F.3d at 1315 (quoting Vitronics, 90 F.3d at 1582); see Markman, 517 U.S. at 389 (referencing the "standard construction rule that a term can be defined only in a way that comports with the instrument as a whole"); Multiform Desiccants, 133 F.3d at 1478.

In addition to the claims and specification, the Court should consider the prosecution history, which consists of the complete record of the proceedings before the United States Patent and Trademark Office ("PTO"), including the prior art cited during the examination of the patent and any subsequent reexaminations. Phillips, 415 F.3d at 1317. The prosecution history "provides evidence of how the PTO and the inventor understood the patent" and "can often inform the meaning of the claim language by demonstrating how the inventor understood the invention and whether the inventor limited the invention in the course of prosecution, making the claim scope narrower than it would otherwise be." Id. (citing Vitronics, 90 F.3d at 1582-83); see also Chimie v. PPG Indus., Inc., 402 F.3d 1371, 1384 (Fed. Cir. 2005) (indicating that "the purpose of consulting the prosecution history" as part of claim construction is to exclude any "disclaimed" interpretation). "At the same time, because

prosecution history represents an ongoing negotiation between the PTO and the inventor, 'it often lacks the clarity of the specification and thus is less useful for claim construction purposes.'" Trading Techs. Int'l, Inc. v. eSpeed, Inc., 595 F.3d 1340, 1352 (Fed. Cir. 2010) (quoting Netcraft Corp. v. eBay, Inc., 549 F.3d 1394, 1401 (Fed. Cir. 2008)).

The Court may also examine extrinsic evidence, which includes "all evidence external to the patent and prosecution history, including expert and inventor testimony, dictionaries, and learned treatises." Markman, 52 F.3d at 980. For example, technical dictionaries may provide the Court with a better understanding of the underlying technology and the way in which one of skill in the art might use the claim terms. Phillips, 415 F.3d at 1318; see also Vitronics, 90 F.3d at 1584 n.6. General usage dictionaries may also be consulted, as they are "often useful to assist in understanding the commonly understood meaning of words" and "[a] dictionary definition has the value of being an unbiased source 'accessible to the public in advance of litigation.'" Phillips, 415 F.3d at 1322 (quoting Vitronics, 90 F.3d at 1585).¹ However, the Federal Circuit cautions that

¹ In Phillips, the Federal Circuit, sitting en banc, expressly discounted the approach taken in Texas Digital Systems, Inc. v. Telegenix, Inc., 308 F.3d 1193 (Fed. Cir. 2002), in which the court placed greater emphasis on dictionary definitions of claim terms. Phillips, 415 F.3d at 1319-20 ("Although the concern expressed by the court in Texas Digital was valid, the methodology it adopted placed too much reliance on extrinsic sources such as dictionaries,

"a general-usage dictionary cannot overcome art-specific evidence of the meaning' of a claim term," that "the use of the dictionary may extend patent protection beyond what should properly be afforded by the inventor's patent," and that "[t]here is no guarantee that a term is used in the same way in a treatise as it would be by the patentee." Phillips, 415 F.3d at 1322 (quoting Vanderlande Indus. Nderland BV v. Int'l Trade Comm'n, 366 F.3d 1311, 1321 (Fed. Cir. 2004)). Additionally, "different dictionaries may contain somewhat different sets of definitions for the same words. A claim should not rise or fall based upon the preferences of a particular dictionary editor, or the court's independent decision, uninformed by the specification, to rely on one dictionary rather than another." Id. Thus, "while extrinsic evidence 'can shed useful light on the relevant art,' [the Federal Circuit has] explained that it is 'less significant than the intrinsic record in determining 'the legally operative meaning of claim language.''" Id. at 1317 (quoting C.R. Bard, Inc. v. U.S. Surgical Corp., 388 F.3d 858, 862 (Fed. Cir. 2004)).

treatises, and encyclopedias and too little on intrinsic sources, in particular the specification and prosecution history."). The Phillips opinion reaffirmed the approach used in Vitronics, Markman, and Innova as the proper approach for claim construction, but acknowledged that there was "no magic formula," and that a district court is not "barred from considering any particular sources . . . as long as those sources are not used to contradict claim meaning that is unambiguous in light of the intrinsic evidence." Id. at 1324.

With the foregoing principles in mind, the Court will now examine the patents and the disputed claim terms.

III. ANALYSIS OF THE DISPUTED CLAIM TERMS

In advance of the Markman hearing conducted by this Court, the parties submitted a joint claim construction and prehearing statement that included two agreed-upon claim terms and ten disputed claim terms. ECF No. 101-2.² The Court adopts the parties' stipulated construction of the agreed-upon terms, and addresses each of the disputed claim terms herein.

A. "User Device" Terms

Defendants argue that proper construction of five of the disputed terms requires the addition of "user device" language to the terms, based upon a "logical reading of the claims and the teachings of the specifications." Defs.' Opening Br. at 10, ECF No. 84; see also id. at 17, 19, 20, 22. Plaintiff disagrees, arguing that "[c]onstruing the claims in this way would improperly limit them to a single embodiment." Pl.'s Opening Br. at 11, ECF No. 67.

As a preliminary matter, the Court acknowledges that the patent specifications state that "a 'user' may refer to any

² The parties agree to the following constructions:

- 1) "locate operation" - "[t]he application of paint, flags, or some other marking object or material to indicate the presence of an underground facility."
- 2) "locate technician" - "[a] person performing a locate operation."

Joint Claim Constr. Chart at 2, ECF No. 101-2.

person operating a device to create an electronic manifest, such as a locate technician, a site supervisor, or any other person or group of people.” ‘204 patent at 12:31-34; ‘359 patent at 4:43-46; ‘344 patent at 4:43-46; ‘341 patent at 12:43-46. Thus, it could be argued that any “device” used to “create an electronic manifest” (or searchable electronic record),” id., could broadly be called a “user device.” Of course, in this context, adopting Defendants’ proposed constructions and adding “user device” to the following terms would be both circular and redundant, as any “device,” when used by a “user,” as defined by the specifications, would fit the definition of a “user device.” However, Defendants do not appear to broadly define “user device” in their claim construction arguments, but, instead, specifically contemplate a “user device” used “by the locate technician . . . in or at a dig area.” Defs.’ Opening Br. at 9, ECF No. 84; see, e.g., id. at 16 (asserting that the patents “indicate[] that an input image is received in the dig area. . . . In other words, the input image is received by the locate technician at his or her user device.” (emphases added)); id. at 18 (discussing “processor/processing unit . . . in the context of a locate operation at a dig area,” and concluding “that the processing unit is part of a user device being used in the dig area” (emphasis added)).³ Accordingly, when determining whether

³ See also Hr’g Tr. at 23, ECF No. 115 (asserting that the

to adopt Defendants' proposed constructions requiring the additional "user device" limitation, the Court necessarily considers the narrow definition Defendants impose upon the phrase "user device" within the context of those constructions.

1. "generate/generating/generation of the searchable electronic record"

a. Proposed Constructions & Court Ruling

Plaintiff: Plain and ordinary meaning. No construction required.

Defendants: "generate/generating/generation of the searchable electronic record at a user device"

Court: Plain and ordinary meaning. No construction required.

b. Discussion

The parties appear to agree that the disputed term itself has a plain and ordinary meaning that requires no construction, but disagree as to whether the phrase "at a user device" should be added to the term. Plaintiff argues that "there is nothing

"essence" of the inventions "the patents purport to cover, is allowing the user to . . . generate the record there at their user device . . . close in time or immediately after they have performed the locate operation"); *id.* at 23-24 (emphasizing that "this information is being collected and these records are being generated in the dig area[, and] at a minimum, it's happening at the user device," even if the locator "drives to wherever he's eating lunch and sits down and does it at his user device"); *id.* at 31 (asserting that an image is received and "loaded into the user device. So it's presented to the locator in the field and displayed on the user device."); *id.* at 34 (discussing the display device and asserting it is "clear from the claim that the display device . . . is happening at the user device," where "[i]t's being displayed for the locator to generate the appropriate record"); *id.* at 50 (alleging that Plaintiff distinguished itself "from the prior art by noting that the recording is done in connection with the locate operation that is being done at the user device").

in the patents to require that a ‘user device’ be used.” Pl.’s Reply Br. at 7, ECF No. 90. Defendants disagree, arguing that “the plain meaning of the claim language indicates that the [searchable electronic record] is generated by the locate technician at the user device in or at a dig area.” Defs.’ Opening Br. at 9, ECF No. 84. Defendants contend that their “proposed construction merely clarifies the scope of the claimed invention based on the only embodiment taught by the specifications.” Defs.’ Reply Br. at 4, ECF No. 89.

The claims, by themselves, do not expressly indicate that generation of the searchable electronic record must occur “at the user device in or at a dig area.” Defs.’ Opening Br. at 9, ECF No. 84. Rather, Defendants rely on the preambles to the relevant claims, which recite methods, media, and apparatus for generating a searchable electronic record of a “locate operation performed by a locate technician in a dig area,” ‘204 patent at 34:52-54, 36:10-12, 36:36-37, or a “locate operation performed by a locate technician,” ‘359 patent at 17:54, 18:54-55, 19:51-52; ‘344 patent at 17:41-42, 18:56, 20:14-15, as the bodies of the claims merely describe the specific steps or components of the respective methods, media, and apparatus, including generation of “the searchable electronic record of the locate operation,” ‘204 patent at 35:8-9, 36:33-34, 36:66-67; ‘344 patent at 17:65-66, 19:2-3, 20:27-28, and “electronically

transmitting and/or electronically storing the searchable electronic record of the locate operation," '359 patent at 18:4-5), 18:60-61, 20:4-5.

The Federal Circuit has offered the following summary of the rules governing interpretation of a claim's preamble:

Whether to treat a preamble term as a claim limitation is "determined on the facts of each case in light of the claim as a whole and the invention described in the patent." Storage Tech. Corp. v. Cisco Sys., Inc., 329 F.3d 823, 831 (Fed. Cir. 2003). While there is no simple test for determining when a preamble limits claim scope, we have set forth some general principles to guide that inquiry. "Generally," we have said, "the preamble does not limit the claims." Allen Eng'g Corp. v. Bartell Indus., Inc., 299 F.3d 1336, 1346 (Fed. Cir. 2002). Nonetheless, the preamble may be construed as limiting "if it recites essential structure or steps, or if it is 'necessary to give life, meaning, and vitality' to the claim." Catalina Mktg. Int'l, Inc. v. Coolsavings.com, Inc., 289 F.3d 801, 808 (Fed. Cir. 2002), quoting Pitney Bowes, Inc. v. Hewlett-Packard Co., 182 F.3d 1298, 1305 (Fed. Cir. 1999). A preamble is not regarded as limiting, however, "when the claim body describes a structurally complete invention such that deletion of the preamble phrase does not affect the structure or steps of the claimed invention." Catalina, 289 F.3d at 809. If the preamble "is reasonably susceptible to being construed to be merely duplicative of the limitations in the body of the claim (and was not clearly added to overcome a [prior art] rejection), we do not construe it to be a separate limitation." Symantec Corp. v. Computer Assocs. Int'l, Inc., 522 F.3d 1279, 1288-89 (Fed. Cir. 2008). We have held that the preamble has no separate limiting effect if, for example, "the preamble merely gives a descriptive name to the set of limitations in the body of the claim that completely set forth the invention." IMS Tech., Inc. v. Haas Automation, Inc., 206 F.3d 1422, 1434-35 (Fed. Cir. 2000).

Am. Med. Sys., Inc. v. Biolitec, Inc., 618 F.3d 1354, 1358-59 (Fed Cir. 2010). Here, contrary to Defendants' argument that the generation of the searchable electronic record must occur "at the user device in or at a dig area," see Defs.' Opening Br. at 9, ECF No. 84, the preambles merely describe the locate operation as being "performed by a locate technician in a dig area," and the claims describe the generation of "the searchable electronic record of the locate operation," without specifying where such generation takes place. Furthermore, the relevant claims describe "structurally complete invention[s] such that deletion of the preamble phrase does not affect the structure or steps of the claimed invention[s]" and the preambles of the relevant claims "merely give[] a descriptive name to the set of limitations in the body of the claim[s]." Biolitec, 618 F.3d at 1358-59 (internal quotation marks and citations omitted). Thus, the preamble language, to the extent it could possibly be interpreted as limiting the generation of the searchable electronic record to occurring in a dig area and at a user device, is "irrelevant to proper construction of the claim[s]." IMS Tech., 206 F.3d at 1434. Accordingly, the Court finds that the claims, by themselves, do not require the generation of a searchable electronic record to occur "at the user device in or at a dig area." Defs.' Opening Br. at 9, ECF No. 84.

Moving beyond the claim language, the specifications also fail to support Defendants' proposed construction. As mentioned above, a searchable electronic record, or "electronic manifest," may be created by users other than a locate technician, such as "a site supervisor, or any other person or group of people." '204 patent at 12:33-34. For instance, "the electronic manifest may be used to train a user," "perform quality control relating to a user's work," "estimate the scope of a subsequent locate operation," or "verify the accuracy of the underground facility locate marks." Id. at 30:61-31:10. At the Markman hearing, Plaintiff's counsel further explained that a person may "generate that record back at the home office," for example, "when something has exploded and you want to find out what is marked." Hr'g Tr. at 37, ECF No. 115. Thus, although the searchable electronic record contains information about a "locate operation performed by a locate technician in a dig area," '204 patent at 34:52-54, it appears clear that the specifications anticipate generation of such searchable electronic records by various users at various times and in various locations - not only during a "locate operation performed by a locate technician in a dig area," id.

Likewise, although the specifications allow for generation of the searchable electronic record to occur "at a user device," see, e.g., id. at 18:23-25 (observing that "user device 210 may

perform certain operations relating to the documentation of locate operations and/or the creation of an electronic manifest" (emphasis added)), nothing in the specifications or the claims indicate that such generation must occur "at a user device," cf. id. at 19:15-18 (noting that "central server 220 may perform certain operations to facilitate the documentation of locate operations and/or the creation of an electronic manifest"); id. at 16:41-44 (stating that, although a "single user device 210, central server 220, and image server 230 have been illustrated as connected to the network for simplicity[,] [i]n practice, there may be more or fewer user devices and/or servers" (emphasis added)); id. at 16:51-52 (observing that "central server 220 may perform one or more of the functions of the user device").

Furthermore, the Federal Circuit has consistently held that "claims will not be 'read restrictively unless the patentee has demonstrated a clear intention to limit the claim scope using "words or expressions of manifest exclusion or restriction.''" Innova/Pure Water, 381 F.3d at 1117 (quoting Liebel-Flarsheim, 358 F.3d at 906 (quoting Teleflex, Inc. v. Ficosa N. Am. Corp., 299 F.3d 1313, 1327 (Fed. Cir. 2002))). If a court "need not rely on a limitation to interpret what the patentee meant by a particular term or phrase in a claim, that limitation is 'extraneous' and cannot constrain the claim." Renishaw PLC v.

Marposs Societa' per Azioni, 158 F.3d 1243, 1249 (Fed. Cir. 1998) (quoting Hoganas AB v. Dresser Indus., Inc., 9 F.3d 948, 950 (Fed. Cir. 1993) ("It is improper for a court to add 'extraneous' limitations to a claim, that is, limitations added wholly apart from any need to interpret what the patentee meant by particular words or phrases in the claim.")). Here, it is entirely possible to interpret what the patentee meant by "generate/generating/generation of the searchable electronic record" without adding the phrase "at a user device." Indeed, the parties propose no construction for any of the words in the disputed term itself. Thus, the proposed user device language is "'extraneous' and cannot constrain the claim." Renishaw PLC, 158 F.3d at 1249. Accordingly, the Court rejects Defendants' efforts to read the phrase "at a user device" into the construction of the disputed term and, instead, adopts the plain and ordinary meaning of the disputed term, as "[t]he task of comprehending [claim] words is not always a difficult one," and in some cases claim construction "involves little more than the application of the widely accepted meaning of commonly understood words." Acumed LLC, 483 F.3d at 805 (quoting Phillips, 415 F.3d at 1314). In so doing, the Court has "resolved" the dispute as to the proper interpretation of the instant claim. See O2 Micro, 521 F.3d at 1360 ("When the parties raise an actual dispute regarding the proper scope of

these claims, the court, not the jury, must resolve that dispute."); Finjan, Inc. v. Secure Computing Corp., 626 F.3d 1197, 1206-07 (Fed. Cir. 2010) (finding "no O2 Micro problem" where the district court not only adopted a "plain and ordinary meaning" construction, but also rejected the defendant's attempt to import a limitation into the disputed claim language because, by rejecting such improper construction, the district court's ruling resolved the legal dispute and did not improperly reserve a legal question for resolution by the jury).

2. "*processor/processing unit*"

a. Proposed Constructions & Court Ruling

Plaintiff: Plain and ordinary meaning. No construction required.

Defendants: "a user device processor/processing unit"

Court: Plain and ordinary meaning. No construction required.

b. Discussion

Plaintiff asserts that this disputed term also requires no construction, but, rather, should be afforded its plain and ordinary meaning. Pl.'s Opening Br. at 6, ECF No. 67. Defendants disagree, alleging that the claim language indicates that "the processing unit is in the dig area," which "supports [a] construction that the processing unit is part of a user device." Defs.' Opening Br. at 18, ECF No. 84. Furthermore, Defendants contend that the "specifications expressly define the

user device as containing a processor or processing unit." Id. at 19. Although the Court has no doubt that, in many - if not most - of the embodiments, a processor/processing unit will be part of a user device, Defendants have failed to demonstrate that the patents require it in all embodiments.

The claim language does not expressly indicate that a processing unit may be located only "in the dig area," or that a processing unit must necessarily be part of "a user device." Defs.' Opening Br. at 18, ECF No. 84. As discussed above, although the preambles to the relevant claims recite various methods, media, and apparatus for generating "a searchable electronic record of a locate operation performed by a locate technician in a dig area," the claims themselves do not require that such generation occur "in a dig area." See, e.g., '204 patent at 36:9-11; '344 patent at 17:40-43, 20:13-16; '359 patent at 18:53-57, 19:50-54. Likewise, most of the relevant claims and their preambles simply describe the processor or processing unit as executing certain instructions during the generation of the "searchable electronic record of a locate operation performed by a locate technician . . . the locate operation comprising identifying . . . a presence or an absence of at least one underground facility within a dig area," and do not require that the generation occur "in a dig area," that the processor or processing unit actually be present "in a dig

area," or that the processor or processing unit exist as part of a "user device." See, e.g., '359 patent at 18:51-55, 19:60-20:5; '344 patent at 17:40-51, 20:12-17; '341 patent at 36:36-39, 36:63-37:9. Even the claims that do describe the performance of the locate operation as taking place "in a dig area" do not require the "generation of the searchable electronic record" to similarly take place "in the dig area." '204 patent at 36:8-12 (emphasis added). Thus, because the claim language does not expressly limit the processor/processing unit to a user device, the Court next considers the specifications to determine whether the patentee demonstrated a clear intention to so limit the claim scope with ""words or expressions of manifest exclusion or restriction.""
Innova/Pure Water, 381 F.3d at 1117 (quoting Liebel-Flarsheim, 358 F.3d at 906 (quoting Teleflex, Inc., 299 F.3d at 1327)).

The patent specifications describe the "exemplary components of the user device," which "may include . . . a processing unit." '204 patent at 17:22-24; '359 patent at 5:39-41. The specifications also describe the "exemplary components of the central server," which "may [also] include . . . a processing unit." '204 patent at 18:44-46; '359 patent at 6:53-55. The specifications explain that the "user device," as well as "the central server," "may perform certain operations to facilitate the documentation of locate operations and/or the creation of an

electronic manifest." '204 patent at 18:23-26, 19:15-18; '359 patent at 6:35-38, 7:24-27. For example, the central server, which is completely separate from the user device, see '359 patent, Fig. 2, may contain its own processing unit, see id., Fig. 4, that "execut[es] software instructions contained in a computer-readable medium, such as the [central server's own] memory," id. at 7:28-30.

Defendants assert that a "closer review of" Figure 6 of the '359 patent reveals that "a user device is the only device disclosed to perform the specific steps of the claimed invention." Defs.' Reply Br. at 5, ECF No. 89. However, as Defendants acknowledge, the "specifications specifically describe FIG. 6 as a 'flow chart 600 of an exemplary process for creating an electronic manifest." Id. (emphasis added). The '359 patent specification clearly states that, although [i]n one implementation, at least some of the blocks of FIG. 6 may be performed using [a] user device, . . . [i]n another implementation, one or more of the blocks of FIG. 6 may be manually performed or performed by another device, such as [the] central server." '359 patent at 11:30-34. Furthermore, the '359 patent specification provides that "aspects, as described above, may be implemented in many different forms of software, firmware, and hardware in the implementations illustrated in the figures" and that many features "recited in the claims and/or

disclosed in the specification . . . may be combined in ways not specifically recited in the claims and/or disclosed in the specification." Id. at 17:37-42. The '204 patent specification further acknowledges that "those skilled in the art will readily appreciate that all parameters, dimensions, materials, and configurations described herein are meant to be exemplary" and that, because "those of ordinary skill in the art will readily envision a variety of other means and/or structures for performing the function," "the foregoing embodiments are presented by way of example only." '204 patent at 33:16-32 (emphasis added). Therefore, a logical reading of the specifications confirms that the processor/processing unit may be part of a user device, a central server, or some "other means and/or structures" readily envisioned by "those of ordinary skill in the art," id., and "not specifically recited in the claims and/or disclosed in the specification," '359 patent at 17:37-42.

Based on the above, the Court agrees with Plaintiff that the plain and ordinary meaning is appropriate for the disputed term, as claim construction regarding this term "'involves little more than the application of the widely accepted meaning of commonly understood words.'" Acumed LLC, 483 F.3d at 805 (quoting Phillips, 415 F.3d at 1314). Furthermore, because the Court "need not rely on [the 'user device'] limitation to

interpret what the patentee meant by ['processor/processing unit'],” the “[‘user device’] limitation is ‘extraneous’ and cannot constrain the claim.” Renishaw, 158 F.3d at 1249 (internal citation omitted). By adopting a plain meaning construction, the Court affirmatively rejects the additional limitation proposed by Defendants, and has “resolved” the dispute as to the proper interpretation of the instant claim. O2 Micro, 521 F.3d at 1360; Finjan, 626 F.3d at 1206-07.

3. “display device”

a. Proposed Constructions & Court Ruling

Plaintiff: Plain and ordinary meaning. No construction required.

Defendants: “a user device display”

Court: Plain and ordinary meaning. No construction required.

b. Discussion

Defendants assert that, because “a logical reading of the claims and specifications requires that the processor/processing unit must be a user device processor/processing device,” and because “the claims also expressly recite that the display device is coupled to the user device processing unit, one skilled in the art would understand this to mean that the display device must be a user device display.” Defs.’ Opening Br. at 20, ECF No. 84. Plaintiff responds that Defendants’ “effort [is not] to actually construe [the disputed term],” but

rather, "to read a limitation into the claims." Pl.'s Reply Br. at 11, ECF No. 90.

Just as the claims and their preambles do not indicate that the processor/processing unit is necessarily part of a user device or that another device, such as a central server, may not have its own processor/processing unit, as discussed above, neither do the claims or their preambles indicate that a display device is necessarily a "user device display." For example, claim 1 of the '344 patent describes an "apparatus for facilitating generation of a searchable electronic record of a locate operation," which includes a "display device," to which a "processing unit" is "coupled." '344 patent at 17:40-49. However, because, as discussed above, the patents do not require either that the generation of a searchable electronic record occur at a user device or that a processing unit exist exclusively as part of a user device, neither does claim 1 of the '344 patent indicate that the display device must necessarily be part of a user device.

Defendants draw the Court's attention to claim 17 of the '341 patent, describing an "apparatus" that also includes a "display device," to which a "processing unit" is "coupled." '341 patent at 36:58-64; see Defs.' Opening Br. at 20, ECF No. 84. This claim, unlike claim 1 of the '344 patent, specifically indicates that the claimed apparatus "documents a performance of

a locate operation" by, among other things, "display[ing] on the display device at least one digital image." '341 patent at 37:1-12. Thus, it appears that claim 17 of the '341 patent may very well anticipate that the display device in that claim is indeed part of a user device used by a locate technician to "document [his or her] performance of a locate operation." Id. However, the Court observes that Defendants, at best, have merely shown that, in some of the claims, a "display device must be a user device display." Defs.' Opening Br. at 20, ECF No. 84. Accordingly, the Court rejects Defendants' efforts to read such a limitation into all claims describing a "display device."

The specifications also fail to support Defendants' argument that the "specifications require that the display device must be a user device display." Id. For instance, the '341 patent specification indicates that a user device may include "an output device 350 (e.g., a display device)," but, in "another implementation, the user device 210 may include more, fewer, or different components." '341 patent at 17:34-39 (emphasis added). The specification goes on to say that the central server, too, "may include more, fewer, or different components. For example, an input device and/or an output device," presumably a display device, "may be included, as necessary." Id. at 18:58-61 (emphasis added). The '341 patent specification also clarifies that "in some instances, the user device 210 may

perform one or more of the functions of the central server 220 and/or central server 220 may perform one or more of the functions of the user device 210." Id. at 16:60-63. Nowhere in the claims or specifications does the Court find a clear intention demonstrated by the patentee to limit the claim scope to a user device. Innova/Pure Water, 381 F.3d at 1117. To the contrary, the specifications appear to carefully anticipate "a variety of other means and/or structures for performing the [specified] function[s]," and present "the [various] embodiments . . . by way of example only." '204 patent at 33:16-32 (emphasis added). As the Federal Circuit has made clear, "[a]bsent a clear disavowal in the specification or the prosecution history, the patentee is entitled to the full scope of its claim language." Home Diags., Inc. v. LifeScan, Inc., 381 F.3d 1352, 1358 (Fed. Cir. 2004). Furthermore, because the Court "need not rely on [the 'user device'] limitation to interpret what the patentee meant by ['display device'], " the "['user device'] limitation is 'extraneous' and cannot constrain the claim." Renishaw, 158 F.3d at 1249 (internal citations omitted). Thus, the claims do not limit the disputed term to a user device, because the specifications clearly anticipate both that a central server may include a display device and that the central server may perform certain functions of a user device. Accordingly, because the disputed term itself has a plain and

ordinary meaning that the parties do not suggest requires construction, the Court adopts Plaintiff's proposed "plain meaning" construction and affirmatively rejects Defendants' attempt to import the "user device" limitation into the disputed term. Finjan, 626 F.3d at 1206-07.

4. "communication interface and/or the memory"

a. Proposed Constructions & Court Ruling

Plaintiff: Plain and ordinary meaning. No construction required.

Defendants: "the communication interface of the user device and/or the memory of the user device"

Court: Plain and ordinary meaning. No construction required.

b. Discussion

Defendants assert that the Court should adopt their proposed construction because it is "the only interpretation supported by the claims of the '204, '359, and '344 patents." Defs.' Opening Br. at 21, ECF No. 84. Plaintiff disagrees, arguing that "[n]owhere does the specification define the 'communication interface and/or memory' to be part of a user device, or disclaim 'communication interfaces' or 'memories' that are not part of user devices." Pl.'s Reply Br. at 14, ECF No. 90. Rather, Plaintiff contends that "the patents clearly explain that a user device is used only in certain implementations." Pl.'s Opening Br. at 12, ECF No. 67.

The language of the claims does not expressly indicate that the communication interface and/or memory must be limited to a user device. All of the relevant claims describe the "communication interface and/or the memory" as being "control[led]" by the processing unit. See '204 patent at 36:46, 36:63-67; '359 patent at 20:2-5; '344 patent at 17:51-52, 18:14-18. Just as the claim language fails to explicitly limit the processing unit to a user device, as discussed above, so, too, does the claim language fail to explicitly limit the communication interface and/or memory to a user device. Thus, the Court next considers the specifications to determine whether the patentee demonstrated a clear intention to limit the claim scope to a user device with "words or expressions of manifest exclusion or restriction." Innova/Pure Water, 381 F.3d at 1117 (citations and internal quotation marks omitted).

The specifications also fail to support Defendants' proposed construction. The specifications of the '204, '359, and '344 patents clearly state that a "central server 220 may include . . . a memory 430, and a communication interface 440." '204 patent at 18:45-47; '359 patent at 6:54-56; '344 patent at 6:53-55; see also '204 patent at Fig. 4 (illustrating exemplary components of central server, including a communication interface and memory). The '204 patent specification also indicates that the "electronic manifest [may be retrieved] from

the memory of the central server or the user device itself.” Id. at 31:11-13 (emphasis added). As discussed above, a searchable electronic record may be generated by persons other than a locate technician to “ensure that the information recorded on the electronic manifest accurately comports with billing data,” id. at 30:44-46, or “to perform quality control relating to a user’s work,” id. at 31:9-10. Because the specification indicates that such persons can also modify the electronic manifest to indicate their review and/or approval of such manifest, id. at 31:10-14, it follows that such persons may also use their own “devices and/or systems,” id. at 19:8, to communicate with the central server’s communication interface, id. at 19:11, for the purpose of transmitting the modified electronic manifest to the central server and/or storing it in the central server’s memory. See, e.g., id. at 33:16-21 (anticipating that “those of ordinary skill in the art will readily envision a variety of other means and/or structures for performing the function . . . and [deeming] each of such variations and/or modifications . . . to be within the scope of the inventive embodiments described herein”). Furthermore, the Court finds nowhere in the specification that the patentee demonstrated a clear intention to limit the claim scope to a “user device.” Innova/Pure Water, 381 F.3d at 1117. Finding no “clear disavowal in the specification or the prosecution

history, the patentee is entitled to the full scope of its claim language." Home Diags., 381 F.3d at 1358. Accordingly, because the disputed term has a plain and ordinary meaning that the parties do not suggest requires construction, the Court adopts Plaintiff's proposed "plain meaning" construction and affirmatively rejects Defendants' attempt to import the "user device" limitation into the disputed term. Finjan, 626 F.3d at 1206-07.

5. "electronically transmitting/transmit and/or electronically storing/store"

a. Proposed Constructions & Court Ruling

Plaintiff: Plain and ordinary meaning. No construction required.

Defendants: "transmitting from the user device over an electronic path, or storing in memory at the user device"

Court: Plain and ordinary meaning. No construction required.

b. Discussion

Plaintiff asserts that this term does not require construction and should be afforded its plain and ordinary meaning. Pl.'s Opening Br. at 6, ECF No. 67. Furthermore, Plaintiff contends that Defendants' proposed construction "is an improper attempt to narrow the claims to one embodiment" and that the term "electronic path" is "vague and never used in the patents." Id. at 13. Defendants argue that "common sense dictates that the locate technician would" receive an input

image "at his or her user device," "generate the marked-up image . . . at the user device," and then electronically transmit or store the marked-up image "from the locator's user device." Defs.' Opening Br. at 16, ECF No. 84. With respect to "electronic path," Defendants argue that "[e]lectronic transmission cannot happen over a physical path, but must occur over an electronic path," and assert that they know of no "barrier to including a word in a construction simply because it was not precisely used in the patents." Defs.' Reply Br. at 8, ECF No. 89.

The Court first considers the "user device" portions of Defendants' proposed construction. The language of the claims does not expressly limit the disputed term to a user device. For example, several claims describe "electronically transmitting and/or electronically storing information relating to the marked-up image" as a step included in a method for "generating a searchable electronic record of a locate operation performed by a locate technician in a dig area." See '204 patent at 34:52-53, 35:6-9, 36:9-10, 36:31-34; '359 patent at 17:53-54, 18:4-5; 18:53-54, 18:60-61; '344 patent at 18:55-56, 19:18-19, 20:13-14, 20:43-44. Other claims, in describing the functions of the processing unit, provide that the processing unit "further controls the communication interface and/or the memory to electronically transmit and/or electronically store

information" See '204 patent at 36:63-65; '359 patent at 20:3-5; '344 patent at 18:14-17. As discussed above, the language of the claims does not require that generation of a searchable electronic record occur at a user device or that a processing unit, communication interface and/or memory must be limited to a user device. For the same reasons, neither does the claim language limit "electronically transmitting/ transmit and/or electronically storing/store" to a user device. Indeed, even if, as Defendants allege, "common sense dictates that the locate technician would [likely] perform those steps at the user device," Defs.' Opening Br. at 84, ECF No. 84, nothing in the words of the claims themselves requires either that a locate technician is the only person who would electronically transmit and/or store the specified information or that such electronic transmission and/or storage must occur at a user device.

The specifications also fail to support Defendants' proposed construction limiting the disputed term to a user device. Defendants point the Court to the '204 patent specification, describing "one implementation" in which "the user device 210 may store multiple data sets corresponding to multiple underground facilities identified at a particular dig area," or "may provide the data sets to server 220 in a batch." '204 patent at 28:18-21. However, the '204 patent specification also clearly indicates that a searchable electronic record may

be "stored in memory associated with the central server," '204 patent at 10:29-33, rather than "at the user device," as Defendants propose. As is the case with all of the previously discussed terms, the Court finds no clear intention demonstrated by the patentee to limit the claim scope to a user device, Innova/Pure Water, 381 F.3d at 1117, and, "[a]bsent a clear disavowal in the specification or the prosecution history, the patentee is entitled to the full scope of its claim language," Home Diags., 381 F.3d at 1358. Thus, the Court rejects Defendants' efforts to read the phrase "from/at a user device" into the construction of the disputed term.

The Court next considers the remainder of Defendants' proposal regarding the phrase "over an electronic path." The Court finds that the jury is more than capable of understanding the everyday words that make up the disputed term, and Defendants' proposal, without the user device limitation, is merely a synonym for the claim language itself. See C.R. Bard, 388 F.3d at 863 (noting that "merely rephrasing or paraphrasing the plain language of a claim by substituting synonyms does not represent genuine claim construction"). Accordingly, the Court adopts the plain and ordinary meaning of the disputed term, and affirmatively "resolves" the dispute as to the proper interpretation of the instant claim. O2 Micro, 521 F.3d at 1360.

B. Remaining Terms

6. "location data"

a. Proposed Constructions & Court Ruling

Plaintiff: Plain and ordinary meaning. No construction required.

Alternate construction: "data that identifies a geographic location"

Defendants: "geographic data provided by a location tracking system"

Court: "data that identifies a geographic location"

b. Discussion

Defendants assert that their proposed construction is appropriate because "location data is consistently described as geographic data throughout the specification." Defs.' Reply Br. at 11, ECF No. 89. Furthermore, Defendants allege that "the specification only describes location data as being determined by, or received from, the location tracking system" and that "[n]othing in the specification teaches, or suggests, that location data is determined any other way." Defs.' Opening Br. at 27, ECF No. 84. Plaintiff disagrees, arguing that nothing in the patent identifies location data as "geographic data" and that "the doctrine of claim differentiation forecloses [Defendants'] attempt" to limit the independent claims to receiving location data from a location tracking system because such limitation is present in dependent claims and would render

those dependent claims "superfluous." Pl.'s Reply Br. at 20-21, ECF No. 90. Plaintiff offered its alternate construction for the first time at the Markman hearing. Hr'g Tr. at 81-82, ECF No. 115.

The doctrine of claim differentiation provides that each claim is different in scope and is based on "the common sense notion that different words or phrases used in separate claims are presumed to indicate that the claims have different meanings and scope." Andersen Corp. v. Fiber Composites, LLC, 474 F.3d 1361, 1369 (Fed. Cir. 2007). Claim differentiation creates a presumption that the difference between claim language is significant and that the Court should not construe terms in such a way as to render the language of a claim superfluous. See Phillips, 415 F.3d at 1315 (noting that "the presence of a dependent claim that adds a particular limitation gives rise to a presumption that the limitation in question is not present in the independent claim"). Of course, "the doctrine of claim differentiation creates only a presumption, which can be overcome by strong contrary evidence such as definitional language in the patent or a clear disavowal of claim scope." InterDigital Commc'ns, LLC v. Int'l Trade Comm'n, 690 F.3d 1318, 1325 (Fed. Cir. 2012).

The language of the '001 patent's independent claims does not require that location data be derived from a location

tracking system. For example, Claim 1 of the '001 patent describes a "system for electronically displaying information relating to use of a marking system or a marking tool," which includes "a processor to receive location data relating to the use of the marking system or the marking tool," but does not specify the origin of the location data. '001 patent at 8:14-20. Similarly, Claim 16 describes a "method for electronically displaying information relating to use of a marking system or a marking tool," which includes "electronically receiving location data relating to the use of the marking system or the marking tool," without dictating the source of the location data or the level of accuracy required of such data. Id. at 9:50-56. Several of the dependent claims, on the other hand, specify that location data in those claims does in fact derive from a location tracking system. For example, Claim 10 describes "a location tracking system communicatively coupled to the processor, wherein the processor electronically receives at least the location data from the location tracking system," id. at 9:7-10, and Claim 24 describes a method that includes "receiving the location data from a location tracking system," id. at 10:24-27.

The presence of the "particular limitation" of a location tracking system that provides location data in dependent claims 10 and 24 "gives rise to a presumption that [such] limitation

. . . is not present in" independent claims 1 and 16. Phillips, 415 F.3d at 1315; see also Liebel-Flarsheim, 358 F.3d at 910 (noting "[t]he juxtaposition of independent claims lacking any reference to [a proposed limitation] with dependent claims that add [such] limitation provides strong support for [the] argument that the independent claims were not intended to require [such limitation]"). Furthermore, the Court finds no "strong contrary evidence" to rebut such presumption. InterDigital Commc'ns, 690 F.3d at 1325. The '001 patent specification states that, "[i]n one implementation, the system 100 may be used to accurately record the geographic location . . . using data from the location tracking system 800." '001 patent at 2:47-49. Defendants' argument that this "one implementation" is "the only implementation disclosed," Defs.' Reply Br. at 11, ECF No. 89 (emphasis in original), is belied by the following embodiments. The embodiment to which Defendants refer is shown in Figure 1 of the '001 patent, which illustrates "a marking system 100 with location and/or time tracking." '001 patent at 2:40-41. Figure 1 shows several components of the marking system, including a "communication system 200, interface 300, local memory 400, processor 500, marker dispenser 600, triggering system 700, location tracking system 800, and timing system 900." Id. at 2:41-46. However, the specification makes clear that, "[i]n other implementations, system 100 may include fewer, different,

or additional elements," suggesting that a location tracking system need not be present in all implementations. Id. (emphasis added). The specification also explains that, although in one aspect "a marking tool may include . . . a location tracking system mounted to, connected to, or located within the housing to determine location data," id. at 1:59-63 (emphasis added), in "another aspect, . . . a marking tool may include . . . [its own] means for determining location data," id. at 2:7-9. Thus, the specification confirms that the patentee did not limit the scope of the claim term "location data" to location data originating only from a location tracking system.

Moreover, even if the specification recited only one embodiment, Defendants' argument pointing out such - without more - is simply not enough. The Federal Circuit has consistently rejected similar arguments. See Phillips, 415 F.3d at 1323 (rejecting the argument that, if "a patent describes only a single embodiment, the claims of the patent must be construed as being limited to that embodiment"). Indeed, it is "not enough that the only embodiments, or all of the embodiments, contain a particular limitation to limit a claim term beyond its ordinary meaning." Aventis Pharma S.A. v. Hospira, Inc., 675 F.3d 1324, 1330 (Fed. Cir. 2012); see also Amhil Enters., Ltd. v. Wawa, Inc., 81 F.3d 1554, 1559 (Fed. Cir.

1996) (holding that a "preferred embodiment . . . is just that, and the scope of a patentee's claims is not necessarily or automatically limited to the preferred embodiment"). As the Federal Circuit has made clear, even where a specification recites only one embodiment, the claim will not be confined to that example "unless the patentee has demonstrated a clear intention to limit the claim scope using words or expressions of manifest exclusion or restriction." Liebel-Flarsheim, 358 F.3d at 906. Because the Court finds no such "clear intention" by the patentee "to limit the claim scope," id., the Court rejects Defendants' proposal that the construction include "provided by a location tracking system."

At the Markman hearing, Defendants agreed that the term "geographic location," as opposed to "geographic data," was acceptable. See Hr'g Tr. at 75, ECF No. 115 (acknowledging that the patent "says geographic location. We use the term geographic data. I don't think we're fussed one way or the other, but it's data that accurately shows the geographic location."). Accordingly, the Court adopts Plaintiff's alternate construction presented at the Markman hearing.

7. "*information relating to the marked-up image*"

a. Proposed Constructions & Court Ruling

Plaintiff: Plain and ordinary meaning. No construction required.

Defendants: "a searchable electronic record and/or a data set, the data set including geographic coordinates"

Court: "non-image data relating generally to a locate operation"

b. Discussion

Plaintiff asserts that Defendants' proposed construction "is clearly wrong, because the 'information relating to the marked-up image' in the patents is a different thing than the 'searchable electronic record.'" Pl.'s Opening Br. at 9, ECF No. 67. Furthermore, Plaintiff alleges that Defendants' proposed construction "would improperly narrow [the term] to require 'geographic coordinates,'" which "is just one example" of "a variety of different types of information" used to identify the location of marks in a marked-up image. Id. at 14-15. Defendants disagree, arguing that "[a]ny confusion with respect to 'information relating to the marked-up image' and 'searchable electronic record' is caused by ambiguities in [Plaintiff's] patents and claims," and that their proposed construction merely "resolves the ambiguities created by [Plaintiff] during the drafting process." Defs.' Reply Br. at 9, ECF No. 89.

The Court rejects Defendants' proposed construction for several reasons. First, the Court observes that Defendants' proposed construction contains the phrase "searchable electronic record," which is a term used throughout the patents and is part

of one of the disputed terms presented to the Court for construction - "searchable electronic record of a locate operation." In this context, a jury could interpret Defendants' proposal as equating "information relating to the marked-up image" to the "searchable electronic record" of the locate operation. However, the specifications explain that "information relating to the marked-up image" is "electronically transmitted or electronically stored so as to generate the searchable electronic record of the locate operation." See, e.g., '204 patent at 5:9-27 (emphasis added); '341 patent at 5:34-37. The specifications also explain that the "marked-up image(s) and the non-image information may be formatted in a variety of manners in the searchable electronic record," including storing "the non-image information . . . as metadata associated with the marked-up image(s)," as well as storing "the marked-up image(s) and the non-image information . . . as separate data sets." See, e.g., '204 patent at 3:30-37. Thus, it is clear that "information relating to the marked-up image" is not the same as the "searchable electronic record." For this reason and, additionally, because including "searchable electronic record" in the construction could confuse the jury, the Court rejects that portion of Defendants' proposal.

Second, the patents do not require that the "information relating to the marked-up image" be "searchable." The patent

specifications explain that the "geographic location of the physical locate mark(s) is . . . indicated in some manner on the displayed input image(s) so as to generate one or more marked-up images constituting at least a portion of the electronic record." '204 patent at 2:66-3:3; '341 patent at 12:64-67. For example, "digital representation(s) of the physical locate mark(s)" can be directly "added to the marked-up image(s)," '204 patent at 3:6-8; '341 patent at 13:1-5, or, as Plaintiff explained at the Markman hearing, "you can draw a bunch of circles and squares" on the displayed image, which "would be data about a mark-up to an image" that could be stored "separately from the image itself." Hr'g Tr. at 56, ECF No. 115. Although it is true that "data embedded within or otherwise associated with the marked-up image may be searchable," it also appears clear that "digital representation(s)," such as "a bunch of circles and squares," are not "searchable (e.g., via a search engine) using key words," despite the fact that such digital representations are nonetheless electronically transmitted or stored in order to generate the searchable electronic record. '204 patent at 16:29-31 (emphasis added). Plaintiff also explained at the Markman hearing that certain other "coded data for the location of markings . . . would be information related to the image and that could be stored," but still "wouldn't be searchable as part

of a search operation generally." Hr'g Tr. at 55, ECF No. 115. Thus, even though the ultimate "electronic record has to be a searchable electronic record," the "information that's related to the marked-up image . . . doesn't need to be something that is itself searchable." Id.

Third, the patents do not limit "information relating to the marked-up image" to a "data set." As discussed above, the patent specifications explain that the "marked-up image(s) and the non-image information may be formatted in a variety of manners in the searchable electronic record," such as storing the non-image information as "metadata associated with the marked-up images," or "in other implementations . . . as separate data sets." '204 patent at 3:30-37; '341 patent at 3:40-47. Thus, the patents clearly allow for "information relating to the marked-up image" that is not formatted as a "data set."

Fourth, the patents do not limit the "information relating to the marked-up image" to "geographic coordinates." Aside from the "digital representations" discussed above, the "non-image information" may include a "variety" of information, such as "a text description of the geographic location," the "address or lot number of a property," "geo-encoded information such as geographic coordinates," a "timestamp for the locate operation,"

or "information regarding one or more environmental landmarks." Id. at 3:16-30; '341 patent at 3:35-40 (emphasis added).

In sum, even though "information relating to the marked-up image" is used to generate the searchable electronic record of a locate operation, and may include "a data set, the data set including geographic coordinates," the patents do not require that such information be limited to "a searchable electronic record and/or a data set, the data set including geographic coordinates," as Defendants propose. Accordingly, the Court rejects Defendants' proposed construction, which would import such limitations to the term.

Although the Court wholly rejects Defendants' proposed construction, it nonetheless determines that the jury will be aided by construction of the disputed term, as it appears that the patentee acted as its own lexicographer in defining "information relating to the marked-up image." Patent law allows a patentee to be a lexicographer, meaning that he "may use terms in a manner contrary to or inconsistent with one or more of their ordinary meanings." Vitronics, 90 F.3d at 1582 (quoting Hormone Research Found., Inc. v. Genentech, Inc., 904 F.2d 1558, 1562 (Fed. Cir. 1990)). However, "[t]o act as its own lexicographer, a patentee must 'clearly set forth a definition of the disputed claim term' other than its plain and ordinary meaning," Thorner v. Sony Computer Entm't Am. LLC, 669

F.3d 1362, 1365 (Fed. Cir. 2012) (quoting CCS Fitness, Inc. v. Brunswick Corp., 288 F.3d 1359, 1366 (Fed. Cir. 2002)), indicating an "'express intent to impart a novel meaning,'" Schering Corp. v. Amgen Inc., 222 F.3d 1347, 1353 (Fed. Cir. 2000) (quoting York Prod., Inc. v. Cent. Tractor Farm & Family Ctr., 99 F.3d 1568, 1572 (Fed. Cir. 1996)). Any special meaning must appear with "reasonable clarity, deliberateness, and precision" in the specification or prosecution history. Abbott Labs. v. Syntron Bioreserach, Inc., 334 F.3d 1343, 1354 (Fed. Cir. 2003) (emphasis omitted) (quoting In re Paulsen, 30 F.3d 1475, 1480 (Fed. Cir. 1994)).

The disputed term appears throughout the asserted claims. The asserted independent claims state that "information relating to the marked-up image" will be "electronically transmitted and/or electronically stored . . . so as to generate the searchable electronic record of the locate operation." See '204 patent at 35:6-9; 36:31-34, 64-67; '341 patent at 35:12-14; 36:56-57; 37:19-20. The asserted dependent claims in the '341 patent describe certain information that must be present in those claims, such as "at least one timestamp indicative of a date and/or a time at which the locate operation is performed," id. at 36:28-30, 38:47-50. However, none of the claims expressly define the disputed term. Thus, the Court next considers the specifications, including the "drawings and

corresponding discussion in the written description," to determine the definition intended by the patentee. Desper Prods. v. QSound Labs., Inc., 157 F.3d 1325, 1336 (Fed. Cir. 1998).

The detailed descriptions of the patents explain that, "[a]s may be observed from FIG. 1, an input image" is the "starting point for creating a searchable electronic record." '204 patent at 13:23-24; '341 patent at 13:36-37. As discussed above, various additional information may be electronically transmitted or stored, either separately or as part of the input image, "so as to generate the searchable electronic record of the locate operation." '204 patent at 5:16-27; '341 patent at 5:26-37. Although the patent specifications make clear that the searchable electronic record illustrated in Figure 9 "is merely exemplary" and, "as described herein may alternatively include other combinations of the information described herein and may be formatted in different manners," '204 patent at 30:11-15; '341 patent at 30:23-26, the patents appear to broadly and consistently define "information relating to the marked-up image" as "non-image information relating generally to the locate operation," '204 patent at 3:25-26; '341 patent at 3:34-36.⁴ Thus, the specification "clearly set[s] forth a definition

⁴ See also '204 patent at 12:23-25, '341 patent at 12:35-38 (describing "non-image information . . . about the locate operation");

of the disputed claim term' other than its plain and ordinary meaning," Thorner, 669 F.3d at 1365 (quoting CCS Fitness, Inc., 288 F.3d at 1366), with "reasonable clarity, deliberateness, and precision," Abbott Labs., 334 F.3d at 1354.

Heeding the warning of the Federal Circuit "against confining the claims to [specific] embodiments" described in the specification, Phillips, 415 F.3d at 1323 (citation omitted), the Court finds that the definition of the disputed claim term, as broadly stated throughout the patent specifications, would be understood by a person of ordinary skill in the art as "the outer limits of the claim term," id; see Hr'g Tr. at 54, ECF No. 115 (assertion by Plaintiff that the definition of the disputed term is "intended to be broad") Accordingly, the Court construes the disputed term broadly, consistent with the patent specifications and Plaintiff's assertion at the Markman hearing, that the disputed term refers to "anything that gives you information about what's in the image" or, put another way, "non[-]image information relating generally to the locate operation." Hr'g Tr. at 54, ECF No. 115.

'204 patent at 12:67-13:2, '341 patent at 13:13-15 (observing that "the searchable electronic record may include a variety of non-image information regarding the locate operation"); '204 patent at 24:1-3, '341 patent at 24:11-13 ("non-image information providing additional details of the locate operation to be performed"); '204 patent at 25:60-61, '341 patent at 26:3-4 (describing "non-image information associated with the 'clear' locate operation," where "no underground facilities were found"); '204 patent at 29:58-59, '341 patent at 30:1-2 ("non-image information relating to the locate operation").

8. "searchable electronic record of a locate operation"

a. Proposed Constructions & Court Ruling

Plaintiff: Plain and ordinary meaning. No construction required.

Defendants: "the marked-up [digital] image combined with or linked to searchable data associated with the marked-up [digital] image"

Court: "one or more computer-readable files that include some or all of the information regarding a locate operation"

b. Discussion

Plaintiff asserts that the "locate operation" portion of the disputed term requires no construction by the Court because 1) the parties have already agreed upon the construction of the term "locate operation," and 2) "'searchable electronic record' is a plain English phrase that is easily understood" and, thus, requires no construction. Pl.'s Opening Br. at 19, ECF No. 67. Furthermore, Plaintiff contends that Defendants' proposed construction improperly "seeks to require that the searchable electronic record include a 'marked-up' image." Id. Defendants disagree, arguing that "the claims sought to be construed expressly require the use of a marked-up image" and, in any event, Defendants' "construction is necessary to provide clarity and define the scope of the applicable claims." Defs.' Reply Br. at 13-14, ECF No. 89. Because the parties have settled upon a definition of "locate operation," the Court need only consider whether to construe the "searchable electronic record" portion

of the disputed term. See, e.g., Superspeed Software, Inc. v. Oracle Corp., 447 F. Supp. 2d 672, 684 (S.D. Tex. 2006) (observing that, because the "parties have already agreed [on] the definition of cache . . . , it is not necessary to re-define cache within the definition of 'cache driver'").

The Court rejects Defendants' proposed construction of the disputed term for two reasons. First, the patents do not require that the "searchable electronic record" contain a "marked-up [digital] image." For example, the asserted claims of the '344 patent state that the claimed apparatus, method, and medium for generating a searchable electronic record involves receiving "an image of a geographic area including a dig area," and "combin[ing] the electronically received image with image-related information so as to generate the searchable electronic record," with no requirement that the "electronically received image" be a "marked-up image." '344 patent at 17:40-65; 18:55-19:3; 20:11-28. Although the above discussion regarding the claim term "information relating to the marked-up image" focuses on one embodiment where a "marked-up image" is included in the "searchable electronic record," not all embodiments of a "searchable electronic record" require a "marked-up image." For example, as the '204 patent specification explains, in certain "locate operations no underground facilities are determined to be present in a designated dig area." '204 patent at 25:52-53.

In those instances, the specification continues, "an input image may nonetheless be employed to provide an electronic record of a 'clear,'" although "no locate mark indicators may be added to an input image . . . because there are no physical locate marks to digitally represent." Id. at 25:54-60. In other words, the input image containing no marks may serve as an affirmative illustration of the absence of underground facilities in the dig area.

The specifications for the '204 and '344 patents also provide that "the electronic manifest may be stored as, for example, a digital image or an interactive electronic map," or "alternatively, in block 670 [of FIG. 6], the geographical coordinates of the underground facility locate marks may be stored in memory." '204 patent at 25:30-35; '344 patent at 12:45-49 (emphases added). Although geographical coordinates may by "used to construct a displayed input image," '204 patent at 14:50, the geographical coordinates themselves are not an image, marked-up or otherwise. Thus, because the patents confirm Plaintiff's assertion that the "searchable electronic record does not have to include a 'marked-up image,' nor does it need to include any image at all," Pl.'s Reply Br. at 4, ECF No. 90, the Court rejects that portion of Defendants' proposed construction.

Second, contrary to Defendants' proposed construction, the patents do not require that the image portion of the searchable electronic record, if present, be "combined with or linked to searchable data." As discussed above, with respect to the "information relating to the marked-up image" disputed term, although an input image and non-image data may be "electronically transmitted and/or electronically stored so as to generate the searchable electronic record," '204 patent at 2:66-3:3; '341 patent at 12:64-67 (emphasis added), the patents do not require that the non-image data itself be searchable. As discussed, such non-image data may consist of "digital representation(s) of the physical locate mark(s)," which can be directly "added to the marked-up image(s)," '204 patent at 3:6-8; '341 patent at 13:1-5, or other "coded data for the location of markings," all of which may be non-image data used to generate the searchable electronic record, but is not itself "searchable as part of a search operation generally," Hr'g Tr. at 55, ECF No. 115. Thus, the Court wholly rejects Defendants' proposed construction.

The Court next considers whether to adopt the plain and ordinary meaning of the disputed term, as Plaintiff suggests. First, the Court acknowledges that the term "searchable electronic record," by itself, has a plain and ordinary meaning that would not ordinarily require construction, and that the

claims themselves do not explicitly define the term beyond its plain and ordinary meaning. For example, the asserted claims of the '204 and '344 patents simply explain that "information relating to the marked-up image" is electronically transmitted and/or stored "so as to generate the searchable electronic record," '204 patent at 35:6-9; 36:31-34; 36:64-67; '344 patent at 17:63-65; 19:1-3; 20:26-28, while the asserted claims of the '359 patent provide that "the searchable electronic record comprises the marked-up digital image and a data set," '359 patent at 18:7-8; see also id. at 18:62-19:5; 20:5-16.

However, when a patentee acts as his own lexicographer, mere "reliance on a term's 'ordinary' meaning [will] not resolve the parties' dispute." O2 Micro, 521 F.3d at 1361-62. Here, the specifications of the asserted patents suggest that the patentee acted as a lexicographer and "clearly set forth a definition of the disputed claim term other than its plain and ordinary meaning," Thorner, 669 F.3d at 1365 (citation and internal quotation marks omitted), and assigned with "reasonable clarity, deliberateness, and precision," Abbott Labs., 334 F.3d at 1354, "a novel meaning" to the disputed term, Schering Corp., 222 F.3d at 1353. See Medrad, Inc. v. MRI Devices Corp., 401 F.3d 1313, 1319 (Fed. Cir. 2005) ("We cannot look at the ordinary meaning of the term . . . in a vacuum. Rather, we must look at the ordinary meaning in the context of the written description and

the prosecution history.”). The specifications document the evolution of the disputed term, explaining generally that “[d]ocumentation of some or all of the information regarding a locate operation is often called a ‘manifest.’” ‘204 patent at 2:17-18; ‘359 patent at 2:12-13; ‘344 patent at 2:6-7. “Because the manifests [were previously] stored as paper or digital images,” however, earlier manifests were “not easily interrogated for data in any mechanized way.” See, e.g., ‘204 patent at 2:45-47. The specifications provide that “a searchable electronic record, also referred to . . . as ‘an electronic manifest,’ id. at 12:18-20, “may generally refer to one or more computer-readable files that include some or all of the information in a manifest,” id.; ‘359 patent at 4:27-29; ‘344 patent at 4:27-29. Therefore, the Court construes the disputed term in a manner consistent with the definitions assigned by the patentee in the specifications of the ‘204, ‘359, and ‘344 patents to the terms “manifest” and “electronic manifest,” otherwise referred to as a “searchable electronic record,” and adopts the construction “one or more computer-readable files that include some or all of the information regarding a locate operation.”

9. “locate [request] ticket”

a. Proposed Constructions & Court Ruling

Plaintiff: “the set of instructions necessary for a locate technician to perform a locate operation that may specify,

for example, the address or description of the dig area to be marked, the day and/or time that the dig area is to be marked, and/or whether the user is to mark the dig area for telecommunications (e.g., telephone and/or cable television), power, gas, water, sewer, or some other underground facility"

Defendants: "the set of instructions necessary for a locate technician to perform a locate operation"

Court: "the set of instructions necessary for a locate technician to perform a locate operation"

b. Discussion

The parties agree that the Court should construe the disputed term. The parties also agree that the construction should include "the set of instructions necessary for a locate technician to perform a locate operation." However, Plaintiff asserts that its proposed construction "provide[s] the complete construction of the term as contemplated in the specifications of the asserted patents." Pl.'s Opening Br. at 26, ECF No. 67. Defendants argue that Plaintiff's proposed construction should not be adopted because it "is riddled with vague and ambiguous phrasing including 'may,' 'and/or,' and 'for example.'" Defs.' Opening Br. at 23, ECF No. 84. Defendants further observe that Plaintiff's own definition of the disputed term in the '341 patent "is identical to the claim construction proposed by [Defendants].'" Defs.' Reply Br. at 17, ECF No. 89.

Claims 7 and 20 of the '341 patent describe a "locate request ticket" as "specifying the dig area and requesting

performance of the locate operation." '341 patent at 35:48-50, 37:54-56. Claims 1, 13, and 26 of the '344 patent identify "ticket information derived from the locate ticket" as "including geographic information identifying the dig area." '344 patent at 17:54-56, 18:61-63, 20:19-21. The specifications for the '341 patent and the '344 patent define such a "ticket" as "[t]he set of instructions necessary for a locate technician to perform a locate operation." '341 patent at 1:67-2:2; '344 patent at 1:46-48. The specifications go on to provide examples of what a "ticket might specify," such as "the address or description of the dig area to be marked, the day and/or time that the dig area is to be marked, and/or whether the user is to mark the dig area for telecommunications (e.g., telephone and/or cable television), power, gas, water, sewer, or some other underground facility." '341 patent at 2:2-8; '344 patent at 1:48-53.

It is well-settled that the Court must "avoid importing limitations from the specification into the claims." Phillips, 415 F.3d at 1323. To do so, the Court must "keep in mind that the purposes of the specification are to teach and enable those of skill in the art to make and use the invention and to provide the best mode for doing so." Id. (citing Spectra-Physics, Inc. v. Coherent, Inc., 827 F.2d 1524, 1533 (Fed. Cir. 1987)). "One of the best ways to teach a person of ordinary skill in the art

how to make and use the invention is to provide an example of how to practice the invention in a particular case." Id. When such examples are provided, the Court must determine whether the cited embodiments "define the outer limits of the claim term or merely [are] exemplary in nature." Id. "The manner in which the patentee uses a term within the specification and claims usually will make the distinction apparent." Id. (citing Snow v. Lake Shore & M.S. Ry. Co., 121 U.S. 617, 630 (1887)).

Here, Plaintiff's proposed construction includes the examples described in the patents of what might be included in a locate request ticket. See 341 patent at 2:2-8; '344 patent at 1:48-53. However, these examples do not appear to "define the outer limits" of the claim term, but appear instead to be merely exemplary. Courts have rejected similar proposals, relying on Phillips to determine "whether the embodiments define the outer limits of the claim or are merely exemplary." See, e.g., Layne Christensen Co. v. Bro-Tech Corp., No. 09-2381-JWL, 2011 U.S. Dist. LEXIS 80319, at *13 (D. Kan. July 22, 2011) (observing that "it is inappropriate to include such examples in the definition of the term"); Plant Equip., Inc. v. Intrado, Inc., No. 2:09-CV-395-JRG, 2012 U.S. Dist. LEXIS 59495, at *32 (E.D. Tex. Apr. 27, 2012) (finding "the suggested inclusion of an example in a construction" improper).

At the Markman hearing, Plaintiff explained its reason for providing the examples, stating that it "just had a feeling like it might be helpful if we gave [the jury] an example of what a locate ticket is." Hr'g Tr. at 95, ECF No. 115. However, Plaintiff informed the Court, "[i]f Your Honor agrees, that's great; if Your Honor doesn't agree, that's great too. Really it's just whatever is helpful to the jury." Id. The Court finds that the jury will be most helped by the portion of the construction agreed upon by the parties, and additionally observes that the inclusion of examples in the construction might suggest to the jury that there are additional unspecified characteristics of a locate ticket, not included in the Court's construction, that are relevant to determining whether an accused product falls within the scope of the proposed construction. See Every Penny Counts, Inc. v. Am. Express Co., 563 F.3d 1378, 1383 (Fed. Cir. 2009) (citing O2 Micro, 521 F.3d at 1361-62) (observing that it is the court's obligation "to ensure that questions of the scope of patent claims are not left to the jury"). Accordingly, the Court declines to include the examples proposed by Plaintiff, and adopts the portion of the construction agreed upon by the parties.

10. "marking system or a marking tool"

a. Proposed Constructions & Court Ruling

Plaintiff: Plain and ordinary meaning. No construction required.

Defendants: "a system incorporated into a marking tool, or the marking tool, wherein the marking tool physically dispenses the one or more markers"

Court: Plain and ordinary meaning. No construction required.

b. Discussion

Plaintiff asserts that this disputed term requires no construction, but, rather, should be afforded its plain and ordinary meaning. Pl.'s Opening Br. at 6, ECF No. 67. Plaintiff further alleges that 1) Defendants' proposed construction is "backward[]" because a marking system "means an entire system that includes, among other things, a marking tool" and 2) nothing in the patent requires that a marking system be "incorporated into a marking tool." Id. at 20 (emphasis in original). Defendants disagree, arguing that the patents teach no other configuration other than a "marking system" that "may be 'particularly suited for incorporation into marking tools for marking underground utilities.'" Defs.' Opening Br. at 24, ECF No. 84 (quoting '001 patent at 4:1-3). Defendants also argue that the term should be "governed by 35 U.S.C. § 112[(f)]"⁵ as a

⁵ Beginning September 16, 2012, the Leahy-Smith America Invents Act, Pub. L. No. 112-29, 125 Stat. 284 (2011) caused 35 U.S.C. § 112 ¶ 6 to be superseded by 35 U.S.C. § 112(f). Because the America Invents Act made no substantive changes to the means-plus-function provision in former 35 U.S.C. § 112 ¶ 6, all prior case law under 35 U.S.C. § 112 ¶ 6 is equally applicable to cases brought under 35 U.S.C. § 112(f). Because this case was filed after September 16, 2012, this Court refers to the current statutory provision, 35 U.S.C. § 112(f). See Elcommerce.com, Inc. v. SAP AG, 745 F.3d 490, 500 n.4 (Fed. Cir. 2014).

means-plus-function claim term because ‘marking system and/or marking tool’ uses words that are merely substitutes for the term ‘means for,’ associated with the functional language ‘configured to dispense.’” Id. In other words, Defendants’ means-plus-function argument appears to be that the term “marking system or a marking tool configured to dispense one or more markers” is equivalent to “means for dispensing one or more markers.” See Hr’g Tr. at 90 (asserting that “‘system’ and ‘tool’ are the equivalent of ‘means’”). Defendants thus assert that, in construing the disputed term under 35 U.S.C. § 112(f), the Court should impose a marker-dispensing limitation upon the marking tool.

The Court rejects Defendants’ proposed construction of the disputed term for several reasons. First, the ‘001 patent does not require that the marking system be “incorporated into a marking tool.” The ‘001 patent specification provides that the marking system, “as broadly described herein, may be particularly suited for incorporation into marking tools for marking underground utilities,” ‘001 patent at 4:1-3 (emphasis added), but none of the embodiments described in the ‘001 patent appear to illustrate a marking system incorporated into a marking tool. The Court notes that the marking system and the marking tool described in the ‘001 patent specification “may include” virtually the same components, see ‘001 patent at 1:51-

67, which may explain the specification's suggestion that the marking system "may be particularly suited for incorporation into marking tools," id. at 4:1-2. However, neither the specification's embodiments nor the claims specify that a marking system is "incorporated into a marking tool," as Defendants suggest in their proposed construction.

Second, the '001 patent does not require that the marking tool itself "physically dispenses the one or more markers." The asserted claims recite "a marking system or a marking tool configured to dispense one or more markers." '001 patent at 8:15, 9:51, 10:44, 10:60-61 (emphasis added). The specification makes clear that, in both the marking system and the marking tool, the markers are physically held and dispensed by a "marker dispenser," and not the marking system or the marking tool itself. See id. at 1:51-52; 1:59-61 (providing that, in "one aspect, a marking system may include a marker dispenser to hold and dispense markers," and in "another aspect, a marking tool may include . . . a marker dispenser mounted to the housing to hold and dispense markers"). Furthermore, dependent claim 5 of the '001 patent suggests the structure of "the marking system or the marking tool, wherein the marking system or marking tool comprises: a marker dispenser to dispense the one or more markers." '001 patent at 8:45-49. Under the doctrine of claim differentiation, the Court must presume that the difference in

language between claims 1 and 5 is significant, "giv[ing] rise to a presumption that the limitation in question is not present in the independent claim". Phillips, 415 F.3d at 1315. Thus, it appears clear that, although a marking system or a marking tool may be "configured to dispense one or more markers," the physical dispensing of the marker is actually performed by a "marker dispenser." '001 patent at 8:15, 9:51, 10:44, 10:60-61 (emphasis added).

Third, the Court rejects Defendants' assertion that, because the disputed claim term is governed by 35 U.S.C. § 112(f), Plaintiff must "be limited to the structure of 'marking system or a marking tool' disclosed in the specification as performing this function." Defs.' Reply Br. at 16, ECF No. 89. 35 U.S.C. § 112(f) permits a patent applicant to "express an element in a combination 'as a means or step for performing a specified function without the recital of structure . . . in support thereof.'" Greenberg v. Ethicon Endo-Surgery, 91 F.3d 1580, 1582 (Fed. Cir. 1996). However, "when an applicant drafts a claim element in that fashion, the element will be construed to cover only 'the corresponding structure . . . described in the specification and equivalents thereof.'" Id. "[U]se of the word 'means' creates a rebuttable presumption that the drafter intended to invoke § 112[(f)] while failure to use the word 'means' creates a rebuttable presumption that the

drafter did not intend the claims to be governed by § 112(f)."
Flo Healthcare Solutions, LLC v. Kappos, 697 F.3d 1367, 1373 (Fed. Cir. 2012). "[T]he presumption flowing from the absence of the term 'means' is a strong one," Inventio AG v. ThyssenKrupp Elevator Ams. Corp., 649 F.3d 1350, 1356 (Fed. Cir. 2011), but such presumption may be overcome "if it is demonstrated that the claim term fails to recite sufficiently definite structure or else recites function without reciting sufficient structure for performing that function," Lighting World, Inc. v. Birchwood Lighting, Inc., 382 F.3d 1354, 1358 (Fed. Cir. 2004) (internal quotation marks omitted). "Ultimately, whether claim language invokes § 112(f) depends on how those skilled in the art would understand the structural significance of that claim language, assessed against the presumptions that flow from a drafter's choice to employ or not employ the term 'means.'" Inventio, 649 F.3d at 1360.

Here, because the claims of the '001 patent do not recite the word "means," the presumption is that 35 U.S.C. § 112(f) does not apply. Furthermore, the Court finds that the "marking system or a marking tool" recited in the claims, '001 patent at 8:15, 9:51, 10:44, 10:60-61, are "sufficiently definite structure[s]" to avoid the application of 35 U.S.C. § 112(f). Lighting World, 382 F.3d at 1358. Indeed, as the Federal Circuit instructs, § 112(f) is not invoked simply "because a

term does not bring to mind a particular structure." Id. "What is important is whether the term is one that is understood to describe structure, as opposed to a term that is simply a nonce word or a verbal construct that is not recognized as the name of structure and is simply a substitute for the term 'means for.' Id. Defendants have failed to show that "marking system or a marking tool" is "simply a nonce word or a verbal construct that is not recognized as the name of structure." Id. Indeed, standard dictionary definitions confirm that "system" and "tool" are terms that are "understood to describe structure." Id. Merriam Webster's Collegiate Dictionary (10th ed. 1997), for example, defines "tool" as "a handheld device that aids in accomplishing a task." Id. at 1243 (emphasis added). "System" is defined in the same dictionary as "a group of devices or artificial objects or an organization forming a network esp. for distributing something or serving a common purpose." Id. at 1197 (emphasis added).

To the extent one might argue that "system" and "tool" are "generic" terms, which "standing alone may connote no more structure than the term 'means,'" the Federal Circuit has also "recognized that surrounding claim language further defining the mechanism can add sufficient structure to avoid a § 112[(f)] construction." Kappos, 697 F.3d at 1374 (citing Mass. Inst. of Tech. v. Abacus Software, 462 F.3d 1344, 1354 (Fed. Cir. 2006)).

The standard dictionary definition of "marking," which modifies "system" and "tool" in the claims, "has a reasonably well-understood meaning as a name for a structure." Kappos, 697 F.3d at 1374; see Merriam Webster's Collegiate Dictionary at 712 (defining "marking" as "the act, process, or an instance of making or giving a mark," and defining "mark" as "a conspicuous object serving as a guide for travelers" or "something (as a line, notch, or fixed object) designed to record position"). Furthermore, although "this definition certainly qualif[ies] the recited ['tool'] . . . with a function or purpose," Kappos, 697 F.3d at 1374 (citation and internal quotation marks omitted), "a drafter's decision to define 'a particular mechanism . . . in functional terms is not sufficient to convert a claim element containing that term into a "means for performing a specified function" within the meaning of section 112[(f)]' because '[m]any devices take their names from the functions they perform,'" id. (quoting Greenberg, 91 F.3d at 1583); see also Power Integrations, Inc. v. Fairchild Semiconductor Int'l, Inc., 711 F.3d 1348, 1365 (Fed. Cir. 2013) ("The proper inquiry is whether the claim limitation itself, when read in light of the specification, connotes to the ordinarily skilled artisan [a] sufficiently definite structure for performing the identified functions"), cert. denied, 134 S. Ct. 900 (2014).

"No evidence intrinsic to the ['001] patent casts doubt on

this conclusion." *Id.*; see Inventio, 649 F.3d at 1357 (observing that, "[i]n cases where the claims do not recite the term 'means,' considering intrinsic and extrinsic evidence is usually helpful"). The written description of the '001 patent sufficiently describes the structure of a marking system, stating that the marking system "may include an optional communication system 200, interface 300, local memory 400, processor 500, marker dispenser 600, triggering system 700, location tracking system 800, and timing system 900." '001 patent at 2:40-45. The written description describes in detail the various components of a marking tool, including, inter alia, "an elongated center housing portion 1200, a top housing portion 1300 and a bottom housing portion 1400. The housing 1100 may be formed of any at least semi-rigid material, and may be formed of a lightweight material such as aluminum or plastic." *Id.* at 4:17-21. The marking tool may also include a "paint canister holder," "actuation mechanism," "handle," "display," "timer," "wireless communication antenna," and "input/output ports." *Id.* at 4:22-5:35. Accordingly, the Court finds that the term "marking system or marking tool," as it is commonly understood and used in the '001 patent, "reasonably imparts sufficient structure." Kappos, 697 F.3d at 1375. In the absence of any compelling contrary evidence regarding "how those skilled in the art would understand the structural significance of that claim

language," Inventio, 649 F.3d at 1356, which it is Defendants' burden to provide, the Court finds that Defendants have failed to rebut the presumption that 35 U.S.C. § 112(f) does not apply.

Having wholly rejected Defendants' proposed construction, the Court agrees with Plaintiff that the plain and ordinary meaning is appropriate for the disputed term, as, based on the above discussion of both the intrinsic and extrinsic evidence, claim construction regarding this term "involves little more than the application of the widely accepted meaning of commonly understood words." Acumed LLC, 483 F.3d at 805 (quoting Phillips, 415 F.3d at 1314)).

IV. CONCLUSION

For the reasons set forth above, the Court issues this Opinion and Order as the construction of the disputed claim terms in the patents-in-suit.

The Clerk is **REQUESTED** to send a copy of this Opinion and Order to counsel of record for the parties.

It is so **ORDERED**.

/s/ *mwd*

Mark S. Davis
UNITED STATES DISTRICT JUDGE

Norfolk, Virginia
May 15, 2014